

Minutes
Herring River Restoration Committee (HRRC)
Cape Cod National Seashore Headquarters
Wellfleet, MA
September 19 & 20, 2017

Members Present: Tim Smith, Steve Spear, Eric Derleth, Steve Block (by phone), Hunt Durey, Hillary Greenberg, Peter Herridge

Others Present: Margo Fenn, Martha Craig, Christine Odiaga, Don Palladino, Carole Ridley, Helen Miranda Wilson, John Portnoy, Kirk Bosma (by phone) and Craig Wood (by phone), Melanie Gange (by phone)

Budget Workshop Session: Friends of Herring River (FHR) has been developing materials for the Restoration Project construction fundraising effort. Carole Ridley and Don Palladino prepared a draft construction and five-year start-up budget for the HRRC members to review. The Committee reviewed the budget structure, including the recommended time frame, categories of cost and the assumptions about contingencies and inflation. The group also reviewed the construction costs estimates for various project elements and allocated the construction costs over the five-year period based on projected construction sequencing.

The Committee suggested a number of changes and clarifications in the draft budget spreadsheet, including grouping marsh and vegetation management activities under the adaptive management section, adding another column to estimate Project costs beyond the five-year time frame, and making modifications to some of the specific cost estimates. Members noted that there are a couple different ways to estimate vegetation and marsh management costs- e.g. using a per acre cost versus calculating the cost of staff time and equipment to do the work. The Committee noted that contingencies for specific construction elements vary somewhat, based on the level of design completed to date. The group generally agreed that it would make sense to include an additional 5% contingency to cover any unforeseen impacts.

The Committee discussed the possible time frames for completing the Phase 1 activities. This will depend, in part, on the adaptive management process. Committee members also suggested that FHR provide a more detailed breakdown of the estimated project management costs. Carole Ridley agreed to revise the draft construction budget as discussed.

Administration/Coordination:

Approval of Minutes: The Committee voted to approve the minutes of the August 24, 2017 HRRC meeting.

Meeting Schedule: The Committee approved the following schedule for upcoming meetings:

Monday, September 25, 2017	HREC meeting
Wednesday, October 18, 2017	HRRC regular meeting
Wednesday, November 15, 2017	HRRC regular meeting

Discussion and Updates:

Legal Issues: The Committee discussed the process for funding and implementing flood protection measures for structurally affected low-lying private properties (LLPs). The Project could perform the construction directly or provide funding to property owners to implement this work. FHR counsel has drafted an initial permission letter for LLP owners to consider.

USGS Water Quality Monitoring: The U.S. Geological Survey (USGS) has been monitoring water quality over the last 24 months at several locations in the lower Herring River, including the existing Chequessett Neck Road (CNR) dike. In July, USGS officials met with some representatives of the HRRC and National Park Service staff to review the results of their work to date and to discuss the need for future work. Funding for the existing program will run out at the end of September 2017.

The Committee discussed how to integrate USGS's work with other monitoring efforts and how to design the post-restoration water quality monitoring program. Some parameters (such as dissolved oxygen, pH and salinity) will be addressed through automated monitoring stations that will be installed in the river. Other chemical sampling is now being performed by USGS at the CNR dike. The Committee agreed that this work should be funded for another year in order to complete three years of baseline water quality data prior to beginning the restoration process. Melanie Gange of the National Oceanic and Atmospheric Administration (NOAA) concurred with this recommendation.

Introduction of Cape Cod National Seashore (CCNS) Acting Superintendent: Kathy Tevyaw introduced Shawn Mulligan, the new Acting Superintendent of CCNS to the HRRC members. Mr. Mulligan is an attorney specializing in environmental compliance and clean-up at the National Park Service.

Update on Adaptive Management: Eric Derleth and Tim Smith provided the Committee with an update on the Herring River Adaptive Management (HRAM) plan. They are working with the Woods Hole Group (WHG) and advisors from the U.S. Geological Survey (USGS) to update and refine the HRAM decision framework and consequence table, looking at the entire Herring River estuary. Ongoing work entails populating the consequence table with the available EFDC and SLAMM modeling results. Direct quantitative results will be used from model output as predictive data values in the adaptive management toolkit. For those objectives where there is not applicable model data, the Project will use expert judgement and elicitation to make predictions about the consequences of different management strategies. Tim Smith noted that the HRAM team needs to distill the decision tool into a simpler format in order to elicit advice from outside experts.

Eric Derleth noted that WHG is also working with the Consensus Building Institute (CBI) to design a process for seeking input on some of the socioeconomic objectives of the HRAM plan. An initial workshop session is proposed to explore this topic further. Dave Smith and Mitch Eaton of USGS have also prepared a draft summary of the adaptive management process, which will be incorporated into the Cape Cod Commission Project of Community Benefit/Hardship Exemption (POCB) application. Martha Craig noted that the WHG scope of work needs to be completed by the end of October 2017.

Hydrodynamic Modeling: Kirk Bosma of the Woods Hole Group joined the meeting by phone to report on the results of recent modeling analysis. He evaluated combined storm surge and precipitation events in different locations within the river under different tide gate openings to ascertain what effects those events would have on freshwater drainage and water levels.

Presentation on Project Phasing: The Committee discussed what to cover in its presentation to the Herring River Executive Council (HREC) on September 25, 2017. The presentation will describe Project phasing and permitting.

Permitting: Cape Cod Commission Project of Community Benefit (POCB)

Application: The Committee discussed a draft POCB application prepared by permitting consultant ESS. FHR staff and consultants reviewed and suggested edits to the draft application and HRRC member input is also needed. Craig Wood of ESS joined the meeting by phone. The Committee discussed a number of remaining tasks, including:

- Updating vegetation cover type mapping
- Updating the vegetation management narrative
- Providing more detail about proposed drainage improvements and sediment supplementation activities
- Updating Project maps and preparation of an updated abutters' list
- Finalizing design plans for Phase 1 low-lying property mitigation
- Updating the Chequessett Yacht and Country Club (CYCC) golf course design plans
- Incorporating regulatory compliance reports from each of the Project engineering consultants

The Committee also discussed ongoing outreach and coordination with low-lying property owners, as well as proposed environmental monitoring activities.

Documents Referred to in the Meeting:

- Minutes of the August 24, 2017 HRRC Meeting